**Index of Claims** 

| Т | Application No. | Applicant(s)   | _ |
|---|-----------------|----------------|---|
|   | 10/788,737      | LIVESAY ET AL. |   |
|   | Examiner        | Art Unit       |   |
|   | Son T. Nguyen   | 3643           |   |

Rejected Allowed

(Through numeral) Cancelled Restricted

Non-Elected N Interference

Appeal Objected

| Cla         | aim  | Date                  |          |          |                |              |          |          |              |  |
|-------------|--|-----------------------|----------|----------|----------------|--------------|----------|----------|--------------|--|
| Cie         |  | $\vdash$              |          | 1        | Т              | rat          | Ť        | Т        | _            | _  |
| Final       | Original                                     | 2/1/05                |          |          |                |              |          |          |              |  |
|             | 1<br>2<br>3<br>4<br>5<br>6<br>7              | \<br>N<br>\<br>\<br>N |          | L        |                |              |          |          |              |  |
|             | _2   | N                     |          |          | <u> </u>       |              |          |          |              |  |
|             | 3  | ✓                     |          |          | L              | _            | <u></u>  | <u>_</u> | ᆫ            | _  |
|             | 4  | ✓                     | <u> </u> | _        | _              |              | L        | ㄴ        | <u> </u>     | <u> </u>   |
|             | 5  | N                     | <u> </u> | <u> </u> | <u> </u>       | _            | <u> </u> | _        | ╙            | <u> </u>   |
|             | 6  | N<br>N                | _        | ╙        | ┞-             | ↓_           | ┡        | ┡        | ┡            | ļ_   |
|             | <u>/</u>                                     | N                     | _        |          | ├              | ┡            | <u> </u> | ┞        | ▙            | <del> </del> _   |
|             | 8  | N                     |          | ⊢        | Ͱ              | ┝            | ⊢        | ⊢        | ⊢            | ├-   |
|             | 9  | ZZ                    | _        | ┝        | ₩              | ⊢            | ╀        | <b>├</b> | ┡            | ▙  |
|             | 10   | N                     | $\vdash$ | $\vdash$ | ├              | ├            | ├        | ╀        | ┢            | ┢  |
|             | 12   | N                     |          | ⊢        | ╁─             | ⊢            | ⊢        | ⊢        | ╁            | ├  |
|             | 13   | N<br>N<br>N           | -        | $\vdash$ | $\vdash$       | $\vdash$     | $\vdash$ | $\vdash$ | $\vdash$     | -  |
|             | 11<br>12<br>13<br>14<br>15<br>16<br>17<br>18 | 1.7                   | -        | $\vdash$ | $\vdash$       | $\vdash$     | $\vdash$ | ╁        | 1-           | <del> </del> —   |
|             | 15   | 000                   | -        | $\vdash$ | ╁              | ╁            | H        | $\vdash$ | <del> </del> | $\vdash$   |
|             | 16   | õ                     | _        | ╁        | H              | H            | $\vdash$ | -        | ⊢            | ╁  |
|             | 17   | Z                     |          | $\vdash$ | ┢              | ╁╌           | ├        | -        | ┢            | ┢  |
|             | 18   | Ë                     |          | $\vdash$ | $\vdash$       | $\vdash$     | ┢        | $\vdash$ | ╁╌           | <del>                                     </del>   |
|             | 19   | $\vdash$              |          | $\vdash$ | $\vdash$       | <del> </del> | $\vdash$ | $\vdash$ | $\vdash$     | ┢  |
|             | 20   | H                     | _        |          | <del>  -</del> | $\vdash$     | $\vdash$ | 一        | t            | $\vdash$   |
|             | 21   | Г                     |          | _        |                | t -          |          | 1        | $\vdash$     | Н  |
|             | 22   |                       |          |          |                |              |          |          |              |  |
|             | 19<br>20<br>21<br>22<br>23<br>24             |                       |          |          |                | Г            |          |          |              |  |
|             | 24   |                       |          |          |                | Г            | Г        | Г        |              |  |
|             | 25<br>26<br>27                               |                       |          |          |                |              |          |          |              |  |
|             | 26   |                       |          |          |                |              |          |          |              |  |
|             | 27   |                       |          |          | <u> </u>       | L            |          |          | L            | L  |
|             | 28<br>29                                     |                       |          | _        | _              |              | _        | _        |              | $ldsymbol{ld}}}}}}}$ |
|             | 29   | Ш                     |          | _        |                | L            |          |          | _            |  |
|             | 30   |                       |          | <u>L</u> | _              |              | <u> </u> | L        | <u> </u>     | _  |
|             | 31<br>32                                     | Ш                     |          | L        | <u> </u>       | <u> </u>     | _        | ┕        | _            | <u> </u>   |
| $\dashv$    | 32   | L.                    |          | <u> </u> | Ь.             | ⊢            | <b> </b> | Ь.       | <u> </u>     | Щ  |
| $\dashv$    | 33   | Ш                     |          | $\vdash$ | $\vdash$       | $\vdash$     | ├-       |          | $\vdash$     | _  |
|             | 34<br>35                                     | Н                     |          | -        |                | ⊢            | $\vdash$ | ├        | $\vdash$     | <del> </del>   |
|             | 36   | Н                     | _        | -        | -              | ⊢            | <u> </u> | $\vdash$ | ├            | $\vdash$   |
|             | 37   | $\vdash$              |          | -        | ⊢              | <del> </del> | -        | $\vdash$ | $\vdash$     | Н  |
|             | 38   | $\vdash$              |          | -        | $\vdash$       | <del> </del> | $\vdash$ | $\vdash$ | -            | Н  |
|             | 39   | $\vdash$              | -        | -        | $\vdash$       | $\vdash$     | ┢╾       | $\vdash$ | $\vdash$     | Н  |
|             | 40   | $\vdash$              | -        | -        | $\vdash$       | $\vdash$     | $\vdash$ | $\vdash$ | $\vdash$     | Н  |
|             | 41   | $\vdash$              |          | $\vdash$ | $\vdash$       | $\vdash$     |          | $\vdash$ | $\vdash$     |  |
|             | 42   | Н                     |          | Т        | $\vdash$       | $\vdash$     | $\vdash$ | H        | 一            | H  |
| $\neg$      | 43   | Н                     |          |          | $\vdash$       | $\vdash$     |          | $\vdash$ | Г            | Н  |
| $\neg \neg$ | 44   |                       |          |          |                | Г            |          |          | Г            | П  |
|             | 45   | $\Box$                |          |          |                |              |          |          |              | П  |
|             | 46   |                       |          |          |                |              |          |          |              | П  |
|             | 47   |                       |          |          |                |              |          |          |              |  |
|             | 48   |                       |          |          |                |              |          |          |              |  |
|             | 49   |                       |          |          |                |              |          |          |              |  |
|             | 50   | Ī                     |          |          |                | _            |          |          | _            | П  |

| Cla      | im       |                     |          |          |              | Dat      | e        |          |          |              | ]   | Cla     | aim      |          |          |          | (        | Date     | 9        |            |          |          |
|----------|----------|---------------------|----------|----------|--------------|----------|----------|----------|----------|--------------|-----|---------|----------|----------|----------|----------|----------|----------|----------|------------|----------|----------|
|          | Original | 2/1/05              |          |          |              |          |          |          |          |              |     | Final   | Original |          |          |          |          |          |          |            |          |          |
|          | 1        | >                   |          |          |              |          | Γ        | Γ        |          |              | 1   |         | 51       | П        |          |          |          |          |          | Г          |          |          |
|          | 2        | z                   |          |          |              |          | Ι        |          |          |              | ]   |         | 52<br>53 |          |          |          |          |          |          |            |          |          |
|          | 3        | ✓                   |          |          |              |          | _        |          |          |              | ]   |         | 53       |          |          |          |          |          |          |            |          |          |
| _        | 4        | ✓                   |          | _        | <u></u>      |          | <u> </u> | L        | _        | L            | ]   |         | 54       | Ш        |          |          |          |          |          |            |          |          |
| _        | 5        | 2                   |          | <u> </u> | <u> </u>     | _        | <u> </u> | _        | L        | L            | 1   | <u></u> | 55       | Ш        |          |          |          |          |          | L          |          |          |
| _        | 6        | z                   |          | <u> </u> | L.           | _        |          | _        | L        | _            |     |         | 56       | Ш        |          |          | L_       | _        |          | _          | _        |          |
| _        | 7        | 2                   |          | _        | <u> </u>     | <u> </u> | _        | _        | ┞        | <u> </u>     |     |         | 57       | Ш        |          |          | _        | _        |          | L          | L        | Щ        |
| 4        | 8        | N                   |          | <u> </u> | <u> </u>     | _        | _        | <u> </u> | <u> </u> |              | Į   |         | 58       | Ш        |          |          | <u> </u> |          | _        | <u> </u>   | <u> </u> | Щ        |
| 4        | 9        |                     |          | ⊢        | _            | <u> </u> | <u> </u> | <u> </u> | _        | <u> </u>     | ┨   |         | 59       | Н        | _        |          | <u> </u> | <u> </u> | <u> </u> | <u> </u> _ |          | Щ        |
| 4        | 10<br>11 | <b>,</b>   <b>z</b> | _        | ⊢        | ├            | -        | ļ        | ├—       | _        |              | ļ ļ | -       | 60       | Н        | $\dashv$ |          | $\vdash$ | L.       |          | <u> </u>   |          | Щ        |
| ┥        | 12       | z   Z               |          | -        | -            | $\vdash$ | H        | ⊢        | ┝        |              | 1   |         | 61       | Н        |          |          | _        | -        | <u> </u> | <u> </u>   | -        | Н        |
| $\dashv$ | 13       | zz                  | _        | <u> </u> | <del> </del> | H        | ⊢        | ⊢        | $\vdash$ | -            | ł   |         | 62       | H        |          |          | _        | H        |          | -          | -        | Н        |
| ┥        | 14       | 0                   |          | -        | ┝            | ⊢        | H        | -        | -        | -            | ł   |         | 63<br>64 | $\vdash$ | _        |          | _        | H        |          | ⊢          | -        | $\vdash$ |
| ᅱ        | 15       | 0                   |          | ⊢        | ├            | $\vdash$ | $\vdash$ | ⊢        | -        | ┢            | 1   |         | 65       | Н        | -        |          | -        | $\vdash$ | _        | ⊢          | $\vdash$ |          |
| ┪        | 16       | 0                   |          | ┝        | $\vdash$     | $\vdash$ | ⊢        | $\vdash$ | ┢        | ╁            | 1   | -       | 66       | Н        | _        | _        |          | $\vdash$ | _        | ┝          | -        | -        |
| ᅥ        | 17       | z                   |          | $\vdash$ | <del> </del> | -        | -        | -        | -        | ┢            | 1   |         | 67       | Н        | -        | _        | ┢        | -        |          | $\vdash$   | $\vdash$ | $\vdash$ |
| 7        | 18       | H                   |          | $\vdash$ | Н            | $\vdash$ | -        | $\vdash$ | -        | <del> </del> | 1   |         | 68       | Н        |          |          |          |          | _        | $\vdash$   | $\vdash$ | $\vdash$ |
| ┪        | 19       |                     |          | $\vdash$ | $\vdash$     |          | $\vdash$ | $\vdash$ | $\vdash$ | ┢            | 1   |         | 69       | Н        |          |          |          |          |          | $\vdash$   | $\vdash$ | Н        |
| ┪        | 20       |                     |          |          | <del> </del> | $\vdash$ | $\vdash$ | $\vdash$ |          | $\vdash$     | 1   |         | 70       | H        | _        |          | _        | $\vdash$ | _        |            | _        | Н        |
| ┪        | 21       |                     |          | -        |              | <u> </u> | _        |          | $\vdash$ | $\vdash$     | 1   |         | 71       | Н        |          |          | $\vdash$ |          | _        | Н          |          |          |
| 7        | 22       |                     |          |          |              |          |          |          | $\vdash$ | _            | 1   |         | 72       | Н        | _        | -        | _        | _        |          |            |          |          |
| 7        | 23       |                     |          |          |              |          |          |          |          | T            | 1   |         | 73       | $\Box$   |          |          | _        |          |          |            |          | П        |
|          | 24       |                     |          |          |              |          |          |          |          |              | 1   |         | 74       |          |          |          |          |          |          |            |          |          |
|          | 25       |                     |          |          |              |          |          |          |          |              | ]   |         | 75       |          |          |          |          |          |          |            |          |          |
| $\Box$   | 26       |                     |          |          |              |          |          |          |          |              | ]   |         | 76       |          |          |          |          |          |          |            |          |          |
| _        | 27       |                     |          |          |              |          |          |          |          |              |     |         | 77       |          |          |          |          |          |          |            |          |          |
| 4        | 28       |                     |          |          |              | _        |          |          |          | $oxed{oxed}$ |     |         | 78       |          |          |          |          |          |          |            |          |          |
| 4        | 29       |                     |          |          |              | _        |          |          | _        |              |     |         | 79       | Ш        | _        |          |          |          |          |            |          |          |
| 4        | 30       | _                   |          |          |              | L        | _        |          | _        | _            |     |         | 80       |          | _        | _        |          |          |          |            |          |          |
| 4        | 31       |                     |          |          |              | <u> </u> |          |          |          | L.           |     |         | 81       |          | _        |          |          |          |          | _          |          | $\Box$   |
| 4        | 32       |                     |          | _        |              | _        | _        | _        |          | _            |     |         | 82       | Щ        | _        | _        |          |          |          |            |          | Ц        |
| 4        | 33       | $\dashv$            |          |          | _            | <u> </u> | L-       |          |          | <u> </u>     | ll  |         | 83       | Щ        |          | _        |          |          | _        | _          |          |          |
| +        | 34<br>35 | $\dashv$            |          |          |              | ⊢        | H        |          | <u> </u> | <u> </u>     |     |         | 84       | $\dashv$ | $\dashv$ |          |          | Ш        |          | Щ          |          |          |
| +        | 36       | $\dashv$            |          |          | -            | $\vdash$ |          |          | -        | ⊢            |     |         | 85<br>86 | $\dashv$ | $\dashv$ | _        | _        | Н        | _        | _          | Н        | $\dashv$ |
| $\dashv$ | 37       | $\dashv$            | -        | $\vdash$ |              | _        |          |          |          | ⊢            |     |         | 87       | -        | $\dashv$ | -        | _        | Н        |          | _          | -        | $\dashv$ |
| ┪        | 38       | -                   | $\dashv$ | -        |              |          | -        |          |          | -            |     |         | 88       | $\vdash$ | $\dashv$ | -        |          | $\vdash$ |          |            | $\vdash$ | $\dashv$ |
| +        | 39       | -                   | -        |          | -            |          | -        |          |          |              |     | -       | 89       | $\dashv$ | $\dashv$ | -        | _        | Н        | _        |            | $\dashv$ | $\dashv$ |
| 7        | 40       | _                   |          |          |              |          | -        |          |          |              | 1   |         | 90       |          |          | _        |          | Н        |          | Н          | $\dashv$ | $\dashv$ |
| 7        | 40<br>41 | 一                   | $\neg$   |          | $\neg$       | _        |          |          |          | _            | il  |         | 91       | $\neg$   | $\dashv$ | _        | -        | $\vdash$ |          |            |          | $\dashv$ |
| 7        | 42       | $\dashv$            | $\neg$   | $\neg$   | $\neg$       |          |          |          |          | -            |     |         | 92       | -        | ┪        | $\neg$   |          |          |          |            | $\dashv$ | -        |
| ┪        | 43       | ┪                   |          |          |              |          |          |          | _        |              |     |         | 93       |          | $\dashv$ | $\dashv$ |          |          | $\dashv$ |            | $\dashv$ | $\dashv$ |
| 7        | 44       | $\neg$              | П        |          |              |          |          |          |          |              |     |         | 94       | $\neg$   | -        | $\neg$   |          |          | -        |            | $\vdash$ | $\dashv$ |
| 7        | 45       | $\dashv$            | $\neg$   |          |              | П        | Н        | $\neg$   |          | Г            | ΙÌ  | $\neg$  | 95       |          | ᅥ        | $\neg$   | -        | $\vdash$ |          | $\Box$     | $\vdash$ | ᅱ        |
| 1        | 46       | ヿ                   |          |          |              |          |          |          |          |              | ı   |         | 96       |          | 一        |          |          |          | -        | $\vdash$   | $\dashv$ | $\dashv$ |
| ╛        | 47       |                     |          |          |              |          |          |          |          |              |     |         | 97       | $\neg$   | $\dashv$ |          |          |          | $\neg$   |            | $\neg$   | ᅥ        |
| I        | 48       | $\Box$              |          |          |              |          |          |          |          |              |     | 1       | 98       |          |          |          |          |          |          |            |          | $\dashv$ |
| Ţ        | 49       |                     |          |          |              |          |          |          |          |              |     |         | 99       |          | コ        |          |          |          |          |            |          | ╗        |
| $\perp$  | 50       |                     |          |          |              |          |          |          |          |              | [   |         | 100      |          | J        |          |          |          |          |            |          |          |
|          |          |                     |          |          |              |          |          |          |          |              | •   |         |          |          |          |          |          |          |          |            |          | _        |

|          | aim                                    | Date     |              |           |          |          |          |              |  |              |
|----------|--|----------|--------------|-----------|----------|----------|----------|--------------|--|--------------|
|          |  | П        | Γ            | Γ         | Γ.       | T-"      | Ť        | П            | Г  | Γ            |
| Final    | Original                               |          |              |           |          |          |          |              |  |              |
|          | 101                                    |          |              |           |          |          |          |              |  |              |
|          | 102                                    |          | <u> </u>     | <u> </u>  | <u> </u> |          |          |              |  | <u> </u>     |
|          | 103                                    | _        | -            | <u> </u>  | -        | -        | ļ        |              | ├  | _            |
|          | 103<br>104<br>105                      | -        | ├            | ├—        | ┝        |          | ⊢        | ⊢            | -  | -            |
|          | 106                                    | _        | $\vdash$     | ┝         | ├        | ┢        | $\vdash$ | ┝            | -  | <del> </del> |
|          | 107                                    |          | $\vdash$     |           |          |          | _        | -            | -  | -            |
|          | 106<br>107<br>108                      |          |              |           |          |          |          |              |  |              |
|          | 109<br>110<br>111<br>112<br>113        |          |              |           |          |          |          |              |  |              |
|          | 110                                    |          | <u> </u>     | <u> </u>  | L        | <u> </u> | _        | 辶            | <u> </u>   |              |
|          | 111                                    |          | <u> </u>     | <u> </u>  | <u> </u> | <u> </u> | _        |              |  |              |
|          | 112                                    |          | ⊢            | -         | ┝        | ├        | ⊢        |              | H  | H            |
|          | 114                                    |          | <del> </del> | ┝         | $\vdash$ | $\vdash$ | $\vdash$ |              | <del>                                     </del> | ┝            |
|          | 114<br>115<br>116                      |          | $\vdash$     | <u> </u>  |          |          | $\vdash$ | Н            |  |              |
|          | 116                                    |          |              |           | Г        |          | $\vdash$ | $\Box$       | _  |              |
|          | 117                                    |          |              |           |          |          |          |              |  |              |
|          | 117<br>118<br>119                      |          |              |           | L        | _        | _        |              |  |              |
|          | 119                                    |          |              | L.        | _        |          | <u> </u> | _            | <u> </u>   |              |
|          | 120<br>121                             | -        |              | <u> </u>  | ├-       | -        | ├-       | _            | L  | _            |
|          | 122                                    | H        | _            | ┝         | ┝        | $\vdash$ | ⊢        | ⊢            | ⊢  | _            |
|          | 123                                    | -        |              |           | $\vdash$ | $\vdash$ | ⊢        | $\vdash$     | ┢╌   |              |
|          | 124                                    | $\neg$   |              |           |          | $\vdash$ | $\vdash$ |              |  |              |
|          | 125                                    |          |              |           |          |          |          |              |  |              |
|          | 122<br>123<br>124<br>125<br>126<br>127 |          |              |           |          |          |          |              |  |              |
|          | 127                                    | _        |              |           |          |          | _        | $oxed{oxed}$ |  |              |
|          | 128<br>129<br>130<br>131<br>132        | _        | _            |           |          | -        |          | -            |  |              |
|          | 130                                    | -        | $\vdash$     | $\vdash$  | -        | $\vdash$ | <u> </u> | $\vdash$     | $\vdash$   |              |
|          | 131                                    | -        | _            |           | ┢        | $\vdash$ | ┢        | $\vdash$     |  | Н            |
|          | 132                                    |          |              |           |          | $\vdash$ | $\vdash$ | -            |  |              |
|          | 133                                    |          |              |           |          |          |          |              |  |              |
|          | 134                                    |          |              |           |          |          |          |              |  |              |
|          | 135                                    |          |              | _         |          | Ш        |          |              | Ш  |              |
| _        | 136<br>137                             | -        |              |           | _        | Н        |          |              | Н  | Ш            |
| _        | 138                                    |          | -            | _         | -        | Н        | _        | -            | Н  |              |
|          | 139                                    |          |              |           | H        |          |          |              | Н  | Н            |
|          | 140                                    |          |              |           |          |          |          |              |  | Н            |
|          | 141                                    |          |              |           |          |          |          |              |  |              |
|          | 142                                    |          |              |           |          |          |          |              |  |              |
|          | 143                                    |          | Щ            |           |          | Ш        | Щ        | Ц            | Щ  | Ц            |
|          | 144                                    | $\dashv$ | Н            |           |          | $\vdash$ | $\vdash$ | Н            | Щ  | Щ            |
|          | 145<br>146                             | $\dashv$ |              | -         |          | Н        |          | Н            | Н  | $\dashv$     |
|          | 147                                    | $\dashv$ | -            | -         | -        | $\vdash$ | Н        | Н            | Н  | $\dashv$     |
| $\dashv$ | 148                                    | $\dashv$ | $\dashv$     | $\dashv$  | Н        | $\dashv$ | H        | $\dashv$     | $\vdash$   | $\dashv$     |
|          | 149                                    | 7        | $\exists$    | $\exists$ |          | $\dashv$ | Н        | $\vdash$     | Н  | $\dashv$     |
|          | 150                                    |          | ╛            |           |          |          |          | П            |  |              |